RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	10/593,213	
Source:	1FWP	
Date Processed by STIC:	9/28/06	
,		•

ENTERED



IFWP

RAW SEQUENCE LISTING DATE: 09/28/2006
PATENT APPLICATION: US/10/593,213 TIME: 11:12:35

Input Set : A:\2107-299.ST25.txt

```
3 <110> APPLICANT: Lotz, Henrike
            Brunner, Herwig
             Rupp, Steffen
      7 <120> TITLE OF INVENTION: Hyphae-Specific Cell Wall Proteins of Candida (As Amended)
      9 <130> FILE REFERENCE: P/2107-299
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/593,213
C--> 12 <141> CURRENT FILING DATE: 2006-09-15
     14 <150> PRIOR APPLICATION NUMBER: 10 2004 013 826.5
    15 <151> PRIOR FILING DATE: 2004-03-16
    17 <160> NUMBER OF SEQ ID NOS: 15
    19 <170> SOFTWARE: PatentIn version 3.3
    21 <210> SEQ ID NO: 1
    22 <211> LENGTH: 336
    23 <212> TYPE: DNA
    24 <213> ORGANISM: Candida Albicans
    26 <400> SEQUENCE: 1
    27 atgaaattet ceaceaettt attagettta acegeeteaa ttgetgetgt tatgtetget
                                                                              60
    29 gattcatcag ctgctgcctc tggtgctqcc tcggctgctt ctggtgccaa atctggtgct
                                                                             120
    31 acctcagetg cttctggtgc caaatccggt gettettcag ttgcttctgc cgctaaatct
                                                                             180
    33 ggtgtttctt cagctgcctc agctgctaaa tctqqtqctt catctgctac cqqtqqttca
                                                                             240
    35 tetgetgeea aatetggete ateaagtggt geeggttttg eteetgtege tggtgetggt
                                                                             300
    37 agettggcag ccattgetgg tettttgttg ttgtaa
                                                                             336
    40 <210> SEQ ID NO: 2
    41 <211> LENGTH: 111
    42 <212> TYPE: PRT
    43 <213> ORGANISM: Candida Albicans
    45 <400> SEOUENCE: 2
    47 Met Lys Phe Ser Thr Thr Leu Leu Ala Leu Thr Ala Ser Ile Ala Ala
                                            10
    51 Val Met Ser Ala Asp Ser Ser Ala Ala Ala Ser Gly Ala Ala Ser Ala
    52
                   2.0
                                        25
    55 Ala Ser Gly Ala Lys Ser Gly Ala Thr Ser Ala Ala Ser Gly Ala Lys
                                    40
    59 Ser Gly Ala Ser Ser Val Ala Ser Ala Ala Lys Ser Gly Val Ser Ser
                                55
    63 Ala Ala Ser Ala Ala Lys Ser Gly Ala Ser Ser Ala Thr Gly Gly Ser
                           70
    67 Ser Ala Ala Lys Ser Gly Ser Ser Gly Ala Gly Phe Ala Pro Val
                       85
                                            90
    71 Ala Gly Ala Gly Ser Leu Ala Ala Ile Ala Gly Leu Leu Leu
                   100
                                        105
    75 <210> SEQ ID NO: 3
    76 <211> LENGTH: 507
```

Input Set : A:\2107-299.ST25.txt

```
77 <212> TYPE: DNA
78 <213> ORGANISM: Candida Albicans
80 <400> SEQUENCE: 3
81 atgagatteg ctttcacaac tgtatcatta tecettttat tgtettettt agttgettea
                                                                          60
83 gaagetgcat cateegatgt teaattettg aetgetttgg taggtgatta teaagateat
                                                                         120
85 aagaccgatt atattaaatt ttttgccacc gcaaaagatg ttccaggtga tttatctacg
                                                                         180
87 ttggctacca aagtgttgac ttatactgat gattcataca caactttgtt gaatgatgat
                                                                         240
89 tctttgaatg tttccaactt agaagcatat gctactagtt tgccatggta ttccagaatt
                                                                         300
91 caagetgatg etggtggeaa aggttetgee teeggttetg cetetggete tggttetgee
                                                                         360
93 aaatcaactg caagtgctga aaaatctagt ggctcaagtg cttctgcttc aagcactgca
                                                                         420
95 ggtggttcct cttctaaagg tggtgtaagt gaacttgttg cccctgttgg tgctgttgtt
                                                                         480
97 ggtgctttgg cagttgcttt aatgtaa
                                                                         507
100 <210> SEQ ID NO: 4
101 <211> LENGTH: 168
102 <212> TYPE: PRT
103 <213> ORGANISM: Candida Albicans
105 <400> SEQUENCE: 4
107 Met Arg Phe Ala Phe Thr Thr Val Ser Leu Ser Leu Leu Leu Ser Ser
108 1
                    5
                                         10
111 Leu Val Ala Ser Glu Ala Ala Ser Ser Asp Val Gln Phe Leu Thr Ala
112
                                     25
115 Leu Val Gly Asp Tyr Gln Asp His Lys Thr Asp Tyr Ile Lys Phe Phe
119 Ala Thr Ala Lys Asp Val Pro Gly Asp Leu Ser Thr Leu Ala Thr Lys
123 Val Leu Thr Tyr Thr Asp Asp Ser Tyr Thr Thr Leu Leu Asn Asp Asp
                        70
                                             75
127 Ser Leu Asn Val Ser Asn Leu Glu Ala Tyr Ala Thr Ser Leu Pro Trp
                                         90
131 Tyr Ser Arg Ile Gln Ala Asp Ala Gly Gly Lys Gly Ser Ala Ser Gly
132
                100
                                    105
135 Ser Ala Ser Gly Ser Gly Ser Ala Lys Ser Thr Ala Ser Ala Glu Lys
136
                                 120
139 Ser Ser Gly Ser Ser Ala Ser Ala Ser Ser Thr Ala Gly Gly Ser Ser
140
                            135
                                                 140
143 Ser Lys Gly Gly Val Ser Glu Leu Val Ala Pro Val Gly Ala Val Val
147 Gly Ala Leu Ala Val Ala Leu Met
148
                    165
151 <210> SEQ ID NO: 5
152 <211> LENGTH: 1682
153 <212> TYPE: DNA
154 <213> ORGANISM: Candida Albicans
156 <400> SEQUENCE: 5
157 atgataatet tteggaaate tttttteaet ttttggettt tgettaatte tgtettaget
                                                                            60
159 cttgttatca ctcaaaacag agtcgatcgt ggtgttcttg acgttagtgt tggaaatatc
                                                                          120
161 accatcaatt ctggagcttc ttggtcaatt atcaacaatg ctatatcaac ccttgttgga
                                                                          180
163 agtttaactg ttcagcccaa tgctggtctt tacattaccc tgacttcacc ccttttgtca
                                                                          240
165 cttcaagtca cattaacttc tttgcttagc acaattcaaa acaatggtat tattgcgttc
                                                                          300
```

Input Set : A:\2107-299.ST25.txt

```
167 aattccctgc cttccttaac atcgtccaca tataatttag ttggtttatc ccttqtcaac
169 actggagaaa tgtatttttc tgcttctggt gttttaccta gtgttatggc tcttactqct
                                                                          420
171 gcatcttggt caaacagtgg attgatggca ttttatcaaa atcaaaqaaq ttctqqtatt
                                                                          480
173 gttagtcttg ggacaccatc aggttcaata accaataatg gtcaaatctg tttgattaac
                                                                          540
175 gaagtetaca aacagaccae aagcateaac ggttetggtt gttteactge caategtaac
                                                                          600
177 tcgacaatat atattgccaa tgtattgtta ccagtttcca catcgcaaaa tttttatttg
                                                                          660
179 gcagacagcc aatcttccat aattgttcaa gctatttcaa cccctcaagt gtttaatgtc
                                                                          720
181 tatgggtttg gtaacggtaa tatggtcggg gttactcttc cattgatcgg taatatatgg
                                                                          780
183 aatccagcat atagttataa tccatccaca ggtattttaa gattgagaaa tttttttgtg
                                                                          840
185 tatcaagatt ttaatattgg teetggttat aateetagtt tatttetgat egttaetgae
                                                                          900
187 aatggtgctg gtcttccctc aacaatactc ggttcggttt cttatagtgg tcctgttcca
                                                                          960
189 ccaagagett taccegeate ttgtaagatt gcatgtaaac cegtgeetae egegeeagga
                                                                         1020
191 actaatccaa ccgagtacac gaccacaata acaacaacaa attctgctgg taaqccattg
                                                                         1080
193 acagaaactg gtgtggttga tattctgact gataqtaacq gatcatqqtt ctcaagtact
                                                                         1140
195 acaatctttc caacttcgtc gtcaagtagt agcagtagca gcactgtttc ttcaactgct
                                                                         1200
197 ccgtcatcct caagcaccaa accttcatcc agtagccaac catcttctac tccaccacca
                                                                         1260
199 tetteaagta gtaaageate ateaactaet eeaageteta qtaqteaate qtetteaact
                                                                         1320
201 actccaaget caageagtaa geetteetea actgtaceae caactggeag cagtcagtea
                                                                         1380
203 tetteaacta teccaagtte cagtacteaa cettetteta etgetecate atetttaagt
                                                                         1440
205 tetecatett ettetaetae tecaagetee ageagteaat etteatttte tgeteaaage
                                                                         1500
207 totattggcc agacategte ttetactgta tetteqteqa qtaqteaacc ateqtqctqq
                                                                         1560
209 gagtcatcaa gcagtcagtc gtcatccggt acgacaagtt ccagtagtca gttttcttca
                                                                         1620
211 agtgccccac cgtcaagtac acaatctctg tttactgctg aaagctccaa tagtcaatta
                                                                         1680
213 tc
                                                                         1682
216 <210> SEQ ID NO: 6
217 <211> LENGTH: 560
218 <212> TYPE: PRT
219 <213> ORGANISM: Candida Albicans
221 <400> SEQUENCE: 6
223 Met Ile Ile Phe Arg Lys Ser Phe Phe Thr Phe Trp Leu Leu Leu Asn
                                        10
227 Ser Val Leu Ala Leu Val Ile Thr Gln Asn Arg Val Asp Arg Gly Val
228
231 Leu Asp Val Ser Val Gly Asn Ile Thr Ile Asn Ser Gly Ala Ser Trp
232
            35
                                40
235 Ser Ile Ile Asn Asn Ala Ile Ser Thr Leu Val Gly Ser Leu Thr Val
239 Gln Pro Asn Ala Gly Leu Tyr Ile Thr Ser Thr Ser Pro Leu Leu Ser
                        70
                                            75
243 Leu Gln Val Thr Leu Thr Ser Leu Leu Ser Thr Ile Gln Asn Asn Gly
247 Ile Ile Ala Phe Asn Ser Ser Pro Ser Leu Thr Ser Ser Thr Tyr Asn
                100
                                    105
251 Leu Val Gly Leu Ser Leu Val Asn Thr Gly Glu Met Tyr Phe Ser Ala
            115
                                120
255 Ser Gly Val Leu Pro Ser Val Met Ala Leu Thr Ala Ala Ser Trp Ser
                            135
259 Asn Ser Gly Leu Met Ala Phe Tyr Gln Asn Gln Arg Ser Ser Gly Ile
                        150
                                            155
```

Input Set : A:\2107-299.ST25.txt

263 264	Val	Ser	Leu	Gly	Thr 165	Pro	Ser	Gly	Ser	Ile 170	Thr	Asn	Asn	Gly	Gln 175	Ile
	Cve	T.011	Tle	Δen		Val	ጥኒን	Lare	Gln		Thr	Cor	Tla	Acn		Car
268	CyB	ЦСЦ	110	180	014	val	- 7 -	Lys	185	1111	1111	ber	110	190	GLY	Der
	~1	C	Dha		71.	7	7	7		mb	T1 -	TT	T1 -		n	77-7
	GIY	Cys		THE	Ата	Asn	Arg		ser	Inr	тте	Tyr		Ата	Asn	vai
272			195		_	_		200					205			_
275	Leu	Leu	Pro	Val	Ser	Thr	Ser	Gln	Asn	Phe	Tyr	Leu	Ala	Asp	Ser	Gln
276		210					215					220				
279	Ser	Ser	Ile	Ile	Val	Gln	Ala	Ile	Ser	Thr	Pro	Gln	Val	Phe	Asn	Val
280	225					230					235					240
283	Tyr	Gly	Phe	Gly	Asn	Gly	Asn	Met	Val	Gly	Val	Thr	Leu	Pro	Leu	Ile
284	_				245	_				250					255	
287	Glv	Asn	Ile	Trp	Asn	Pro	Ala	Tvr	Ser	Tvr	Asn	Pro	Ser	Thr	Glv	Ile
288	•			260				•	265	-				270	-	
	Leu	Ara	Leu	Ara	Asn	Phe	Phe	Val		Gln	Asp	Phe	Asn	-	Glv	Pro
292		5	275	3				280	-1-				285		2	
	Glv	Tvr		Pro	Ser	Leu	Phe		Tle	Val	Thr	Asn		Glv	Δla	Glv
296	017	290	11011		001	200	295	501		•		300	11011	017	1114	<u> </u>
	T.e.ii		Ser	Thr	т1Д	Leu		Sor	17 = 1	Sar	Фулт		Gl v	Dro	1721	Dro
	305	110	Der	1111	116	310	Gry	SCI	vai	Ser	315	Der	Gry	FIO	Val	320
		7 ~~	ת ד ת	T 011	Dro		C ~ ~	C	T	Tla		C	T	Dwo	1707	
	PLO	Arg	Ala	ьеи		Ala	ser	Cys	ьуѕ		Ala	Cys	ьуѕ	PIO		PIO
304	m1	77.	D	01	325	7	D	m)	a 1	330	m1	m1	m1	- 1.	335	ml
	Thr	Ala	Pro		Thr	Asn	Pro	Inr		Tyr	Thr	Thr	Thr		Thr	Thr
308	_,	_	_	340		_	_	_	345					350	_	
	Thr	Asn		Ala	Gly	Lys	Pro		Thr	Glu	Thr	Gly		Val	Asp	Ile
312		_	355					360					365			
315	Ser	Thr	Asp	Ser	Asn	Gly	Ser	Trp	Phe	Ser	Ser	Thr	Thr	Ile	Phe	Pro
316		370					375					380				
319	Thr	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Thr	Val	Ser	Ser	Thr	Ala
	385					390					395					400
323	Pro	Ser	Ser	Ser	Ser	Thr	Lys	Pro	Ser	Ser	Ser	Ser	Gln	Pro	Ser	Ser
324					405					410					415	
327	Thr	Pro	Pro	Pro	Ser	Ser.	Ser	Ser	Lys	Ala	Ser	Ser	Thr	Thr	Pro	Ser
328				420					425					430		
331	Ser	Ser	Ser	Gln	Ser	Ser	Ser	Thr	Thr	Pro	Ser	Ser	Ser	Ser	Lys	Pro
332			435					440					445		_	
335	Ser	Ser	Thr	Val	Pro	Pro	Thr	Gly	Ser	Ser	Gln	Ser	Ser	Ser	Thr	Ile
336		450					455	•				460				
	Pro		Ser	Ser	Thr	Gln		Ser	Ser	Thr	Ala		Ser	Ser	Leu	Ser
	465					470					475					480
		Pro	Ser	Ser	Ser	Thr	Thr	Pro	Ser	Ser		Sar	Gln	Ser	Ser	
344	DCI	110	DCI	DCI	485	1111	1111	110	DCI	490	JCI	DCI	0111	DCI	495	1110
	Sor	77.	Gln	Sar		Ile	Glar	Cln	Thr		802	cor	Thr	17 n 1		Cor
	Ser	AIa	GIII		261	116	Gry	GIII		Ser	ser	ser	1111		per	Ser
348	0	0	0	500	D	0	0	m	505	0	0	0	O	510	0	C ~
	ser	ser		GIN	Pro	Ser	cys	_	GIU	ser	ser	ser		GIN	ser	ser
352	~	~ 7	515	~ 1	-	_		520	~-	_,	_	_	525		_	_
	ser		Thr	Thr	Ser	Ser		Ser	GIn	Phe	Ser		Ser	Ala	Pro	Pro
356	_	530	_•	-	_		535		_			540				
359	Ser	Ser	Thr	Gln	Ser	Ser	Phe	Thr	Ala	Glu	Ser	Ser	Asn	Ser	Gln	Leu

Input Set : A:\2107-299.ST25.txt

360	545 550	555	560
	<210> SEQ ID NO: 7		
	<211> LENGTH: 30		
365	<212> TYPE: DNA		
366	<213> ORGANISM: Candida Albicans		
368	<400> SEQUENCE: 7		
369	aagggccca caaaataaaa gcagcaggaa		30
372	<210> SEQ ID NO: 8		
373	<211> LENGTH: 29		
374	<212> TYPE: DNA		
375	<213> ORGANISM: Candida Albicans		
377	<400> SEQUENCE: 8		
378	ccgctcgagt tccaacttta atcccgcac		29
	<210> SEQ ID NO: 9		
382	<211> LENGTH: 36		
	<212> TYPE: DNA		
	<213> ORGANISM: Candida Albicans		
	<400> SEQUENCE: 9		
	ataagaatgc ggccgcgtgc caccagtcaa	attcaa	36
	<210> SEQ ID NO: 10		
	<211> LENGTH: 27		
	<212> TYPE: DNA		
	<213> ORGANISM: Candida Albicans		
	<400> SEQUENCE: 10		
	cgagctcccg aaatgccacc atagttt		27
	<210> SEQ ID NO: 11		
	<211> LENGTH: 29		
	<212> TYPE: DNA <213> ORGANISM: Candida Albicans		
	<213 ORGANISM: Candida Albicans <400 SEQUENCE: 11		
	aagggcccgt gcggggatta aagttggaa	•	29
	<210> SEQ ID NO: 12		23
	<211> LENGTH: 29		
	<212> TYPE: DNA		
	<213> ORGANISM: Candida Albicans		
	<400> SEQUENCE: 12		
	ccgctcgagt tgttgttgta agcgaagcc		29
	<210> SEQ ID NO: 13		•
418	<211> LENGTH: 36		•
419	<212> TYPE: DNA		
420	<213> ORGANISM: Candida Albicans		
	<400> SEQUENCE: 13		
423	ataagaatgc ggccgctgaa tgagaatgag	ggggac	36
	<210> SEQ ID NO: 14	-	
427	<211> LENGTH: 27		
428	<212> TYPE: DNA		•
429	<213> ORGANISM: Candida Albicans	•	
	<400> SEQUENCE: 14		
432	cgagctcttg aatttgacgg gtggcaa		. 27

VERIFICATION SUMMARY DATE: 09/28/2006 PATENT APPLICATION: US/10/593,213 TIME: 11:12:36

Input Set : A:\2107-299.ST25.txt

Output Set: N:\CRF4\09282006\J593213.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application Number L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date